ENVIRONMENTAL ASSESSMENT

BEACH AREA ENHANCEMENTS

HURLBURT FIELD, FLORIDA

July 2003

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BEACH AREA ENHANCEMENTS

HURLBURT FIELD, FLORIDA

INTRODUCTION

Hurlburt Field proposes to expand and enhance facilities at an existing beach area on Santa Rosa Sound that is a popular recreation area for base personnel. In accordance with Title 32 Code of Federal Regulations (CFR) 989, Environmental Impact Analysis Process (EIAP), and the President's Council on Environmental Quality regulations for implementing the procedural provisions of the National Environmental Policy Act (NEPA) (40 CFR 1500-1508), the attached environmental assessment (EA) provides analyses of potential environmental consequences that could result from construction and use of the proposed facilities.

THE PROPOSED ACTION AND ALTERNATIVES

The proposed action is to construct an elevated boardwalk and four open-air pavilions on the Santa Rosa Sound shoreline. An additional 28,080 square feet of gravel parking areas will also be added in the area. The project will provide additional opportunity for recreation and enhanced access to an existing beach recreation area for base personnel on Hurlburt Field. On weekends and holidays during spring and summer months and other peak use times, the available parking at the beach area as it exist today quickly fills to capacity. In addition, the one small pavilion currently located at the site does not adequately support the public need for such facilities at the site. Additional pavilions would provide shade and tables and would be heavily utilized by beach goers for picnics and other gatherings. In addition, the pavilions would be designed large enough to accommodate fairly large groups of base personnel for official functions. The improvements will include no permanently occupied structures, no water, sewer, electric or other utilities.

Waterfront public access and recreation areas are inherently limited on Hurlburt Field due to the base's small size. The proposed project site is the only location on base that offers the base public beach and water access; therefore the no-action alternative was the only alternative to the proposed action considered. The no-action alternative would be to not

construct any form of the beach area enhancements described above, but to leave the proposed site in its existing condition.

ENVIRONMENTAL EFFECTS

Construction activities would cause negligible and temporary increases in soil erosion that would be minimized through best management practices (BMP's). Some traffic congestion might occur on Marina Road as a result of construction but problems would be minor since this is a low traffic volume road with no outlet, servicing only the Hurlburt Marina past the beach area. Beach patrons would be prevented from utilizing the beach area during construction activities. Wetlands would be avoided but the proposed project is sited in the I DO-year floodplain. Relocating the project far enough inland to gain the elevation necessary to rise above the floodplain would not be compatible with the nature of the project. Stormwater retention areas will be incorporated to accommodate run-off from impervious areas associated with the pavilions and additional parking areas.

CONCLUSION

In accordance with the Council on Environmental Quality regulation implementing the National Environmental Policy Act of 1969, as amended, and 32 CFR 989, and assessment of the identified environmental effects has been prepared for the proposed Hurlburt Field beach area improvements project. Based on the information and analysis presented in the attached EA, the U.S. Air Force has determined the proposed action does not significantly impact the quality of the natural or human environment, thus an Environmental Impact Statement is not warranted. The signing of this FONSI/FONPA completes the Air Force's environmental impact analysis process.

Issued this 8th day of September, 2003

JOHN H. FOLKERTS, Brig Gen, USAF
Vice Commander

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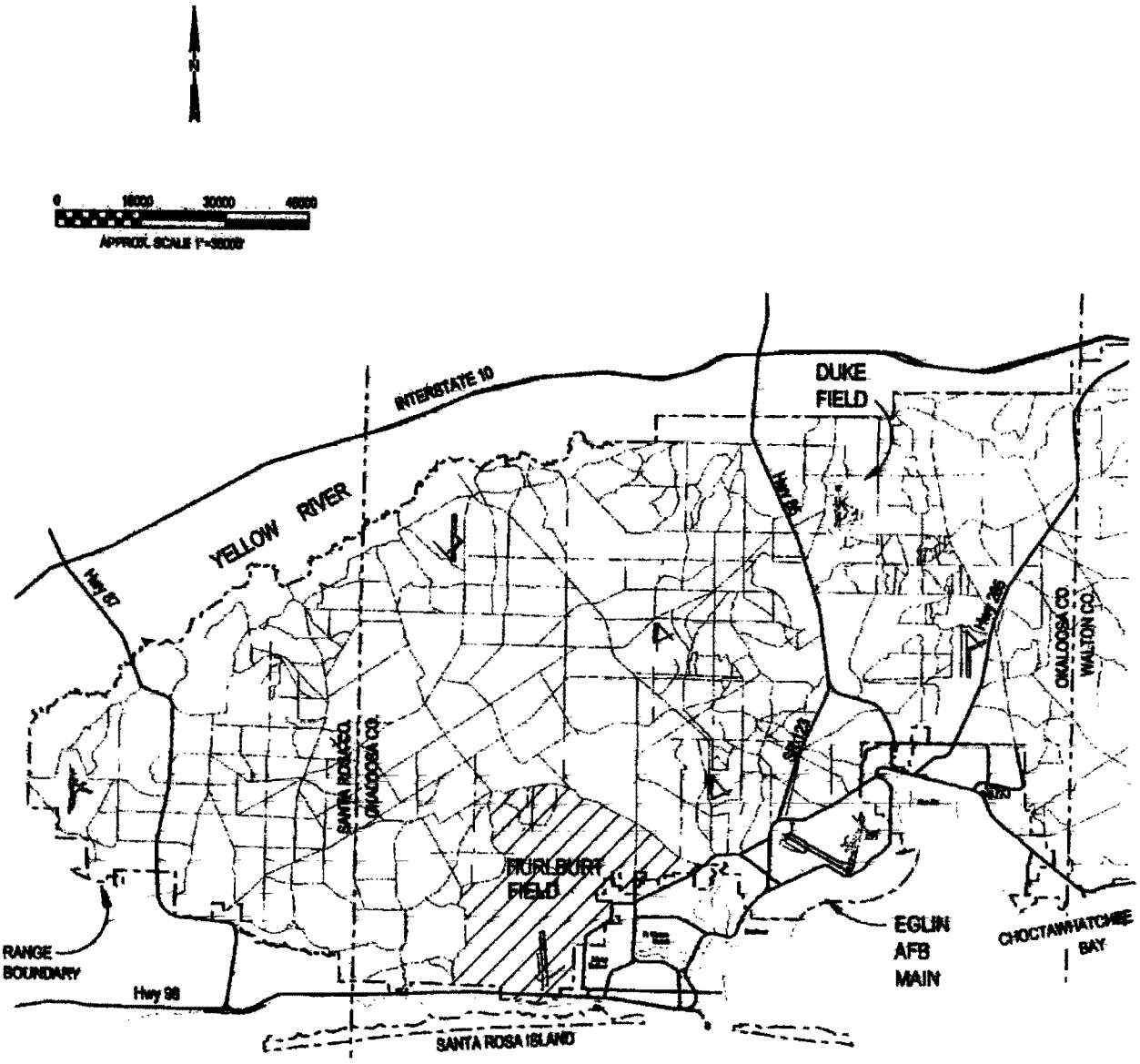
Acronym List

AFSOC	Air Force Special Operations Command
BMP	Best Management Practice
CZMA	Coastal Zone Management Act
EIAP	Environmental Impact Analysis Process
EO	Executive Order
EPA	Environmental Protection Agency
FDEP	Florida Department of Environmental Protection
IRP	Installation Restoration Program
NPDES	National Pollutant Discharge Elimination System
RCW	Red-cockaded Woodpecker
SHPO	State Historic Preservation Officer
SOW	Special Operations Wing
SWPPP	Stormwater Pollution Prevention Plan
USACE	U.S. Army Corps of Engineers
USFWS	U.S. Fish & Wildlife Service



Site Location Map
Hurlburt Field

1.0 PURPOSE OF AND NEED FOR PROPOSED ACTION

The purpose and need of the Proposed Action (the construction of an elevated boardwalk and four open-air pavilions on Santa Rosa Sound shoreline) is to provide additional opportunity for recreation and enhanced access to an existing beach recreation area for base personnel on Hurlburt Field. On weekends and holidays during spring and summer months and other peak use times, the available parking at the beach area as it exists today quickly fills to capacity. In addition, the one small pavilion currently located at the site does not adequately support the public need for such facilities at the site. Additional pavilions would be heavily utilized by beach goers for picnics and other gatherings. In addition, the pavilions would be designed large enough to accommodate fairly large groups of base personnel for official functions.

Waterfront public access and recreation areas are inherently limited on Hurlburt Field due to the base's small size. The proposed project site is the only location on base of its nature that offers the base public beach and water access. The remainder of Hurlburt's shoreline contains protected wetlands, is within the flightline clearzone, is designated industrial use, fronts base housing or is slated for development in the near future (conference center). The limited amount of shoreline available dictates Hurlburt enhance and fully utilize those areas that are compatible with this type use to the full extent possible and environmentally prudent, before seeking re-designations of land use in other areas.

2.0 DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES

2.1 Proposed Action

The Proposed Action is for Hurlburt Field to construct approximately 100 feet of elevated boardwalk and four open-air pavilions on Air Force property located south of U.S. Highway 98 along the Santa Rosa Sound shoreline (see figure 1, page 16). The boardwalk will be 8 feet wide for a total of 800 square feet and the pavilions will be approximately 25 feet by 25 feet for a total of 625 square feet each. The project will also include two additional gravel parking areas for users of the beach area and pavilions. The larger of the two parking areas will be located north of Marina Road and will be approximately 22,500 square feet. The smaller parking area will be south of Marina Road and will be approximately 5,580 square feet.

Boardwalks and three of the four pavilions will be constructed with recycled plastic lumber or other similar non-wood products to ensure longevity and reduce maintenance. Boardwalks and the three wood

pavilions will be constructed at approximately 18" above existing grade and will be supported by pilings, approximately 12" in diameter. Support pilings will be recycled plastic, treated wood or wood composite depending on availability. If treated wood is utilized, design specifications will ensure that any and all treatment compounds are environmentally safe and approved by the Environmental Protection Agency for use in such applications. The fourth pavilion will be a prefabricated metal structure and will be constructed on a concrete slab.

The additional 28,080 square feet of gravel parking areas will be sloped during construction in a way so as to direct stormwater into adjacent retention/detention areas for treatment. Stormwater treatment will also be provided for the four pavilions. These treatment areas will meet design criteria for swales as described in Florida Department of Environmental Protection's DEP 62-25, Regulations of Stormwater Discharge.

The proposed construction site was used over two decades ago by the U.S. Army Corps of Engineers as a spoil site for sand dredged from the Intracoastal Waterway navigation channel during periodic maintenance dredging. The deep sandy soils are sparsely vegetated and would require minimal clearing of mostly shrub and herbaceous plants.

The improvements will include no permanently occupied structures, no water, sewer, electric or other utilities.

2.2 No-Action Alternative

The proposed project site is the only location on base that lends itself to the nature of the action being proposed; therefore the No-Action Alternative was the only alternative to the proposed action considered.

The No-Action Alternative would be to not construct any form of the beach area enhancements described in the Proposed Action, but to leave the proposed site in its existing condition.

3.0 AFFECTED ENVIRONMENT

3.1 Soils

The soils of Hurlburt Field are derived from sedimentary deposits of fluvial and marine origin. The majority of soils are sandy and have low fertility. Soil density is relatively low, reflecting the high permeability of the surface soils and the relatively low direct runoff in the area. Erosion potential for all soils is considered slight due to the relatively level topography, except along Santa Rosa Sound, where it is moderate. Prime farmland soils do not occur within the installation.

3.2 Surface Hydrology and Water Quality

Hurlburt Field is generally divided into two drainage basins or watershed regions. The northern two-thirds of the installation predominantly drains north and northwest into East Bay Swamp, while the southern third drains surface waters southward into Santa Rosa Sound. Surface waters in East Bay Swamp and East Bay River flow westward into East Bay. Manmade drainage ditches direct surface water flow (usually intermittent) into wetlands to the north. Stormwater retention/detention basins intercept drainage from the north to Santa Rosa Sound. Additionally, a very small region of land adjacent to the golf course drains eastward into Cinco Bayou, and thereafter into Choctawhatchee Bay (USACE, 1994).

Extensive swamps, marshes, ponds, and bayous occur in and around Hurlburt Field. Wetland areas within the installation are discussed below under Ecological Resources.

The Coastal Zone Management Act (CZMA) requires federal facilities to carry out their activities in a manner consistent with the state's coastal zone management program. Coastal zones are regulated under the Florida Coastal Zone Protection Act (1985) by the Florida Department of Environmental Protection (FDEP). However, since the installation is outside the 1,500-foot coastal construction control line (as measured landward from the gulf side of Santa Rosa Sound), this regulation does not apply to Hurlburt Field.

Hurlburt has an up-to-date Storm Water Pollution Prevention Plan (SWPPP) developed in accordance with Air Force Instruction 32-7041, *Water Quality Compliance,* and in compliance with the NPDES Multi-Sector General Permit issued by the Environmental Protection Agency (EPA). The SWPPP identifies all industrial and other potential sources of non-point source pollutants occurring within the 11 distinct drainage basins on Hurlburt Field.

3.3 Wetlands and Floodplains

Air Force Instruction 32-7064 directs that installations shall develop and maintain current inventories of wetlands in order to plan for long-term protection or mitigation. Federal regulations applicable to wetlands include Executive Order (EO) 11990 and Section 404 of the Clean Water Act.

Regions of 100-year floodplains are extensive on Hurlburt Field. As expected, there is a strong correlation between those areas mapped as wetlands and the 100-year floodplain. Consequently, most of the northwest portion of the installation and much of the northeast occur

within floodplains. Scattered, isolated floodplain pockets also occur east and west of the airfield, and a floodplain/storm surge fringe exists where the installation borders Santa Rosa Sound. Federal regulations applicable to floodplain management include EO 11988.

Formal delineations of state and federal jurisdictional wetlands were conducted in 1995-97 and confirmed by the U.S. Army Corps of Engineers (USACE) (Panama City office) and the FDEP (Woolpert, 1998). The majority of wetlands occur in the northern half of the installation and are contiguous with East Bay Swamp. The most common wetland types within the installation include cypress-gum swamps, cypress domes, shrub wetlands, and herbaceous wetlands. Within the installation, cypress-gum swamp habitat is most prevalent within the northern half of the installation, which borders East Bay Swamp. Herbaceous wetlands are generally infrequent and small.

3.4 Rare, Threatened, and Endangered Species

Important habitat areas for threatened and endangered flora are widespread on Hurlburt Field with the greatest densities occurring in the western portion of the installation where wet flatwoods, cypress domes, and other wetlands are common. Surveys for rare plant species in recent years include those documented in Florida Natural Areas Inventory (FNAI) (1992, 1994b), Labat-Anderson (1994), Printiss and Hipes (1997), and USAF (2001).

According to Printiss and Hipes (1997), approximately 60 rare, threatened, and endangered plant species may occur on Hurlburt Field. A total of 18 rare plant species have been discovered to date (Table 1), of which 14 species were located during surveys by the above authors. The only federal-listed plant possible within Hurlburt Field is the endangered perforate reindeer lichen (*Cladonia perforata*), which was not found in any survey to date.

The most widespread state-listed plant species known on the installation include the white-top pitcherplant (*Sarracenia leucophylla*), parrot pitcherplant (*Sarracenia psittacina*), Chapman's butterwort (*Pinguicula planifolia*), Curtiss' sandgrass (*Calamovilfa curtissii*), and Carolina lilaeopsis (*Lilaeopsis carolinensis*).

Important habitat areas for threatened and endangered fauna are also widespread on Hurlburt Field. Aside from aquatic species observed along Santa Rosa Sound, the majority of other critical fauna habitats occur in

the western portion of the installation and include pine flatwoods as well as cypress dome wetlands. Surveys for rare faunal species in recent years include those documented in Florida Natural Areas Inventory (FNAI) (1992, 1994b), Labat-Anderson (1994), USAF (2001), Printiss and Hipes (1997, 2000 and 2002), and Flowers (1997).

Table 1
Federal, State, Rare and Species of Special Concern Reported From Hurlburt Field

Scientific Name	Common Name	Federal/State Status
Plants		
Calamovilfa curtissii	Curtiss' Sand Grass	*/T
Calopogon tuberosus	Grass Pink	_/_
Cleistes divaricata	Rosebud Orchid	_/T
Drosera intermedia	Water Sundew	_/T
Helianthemum arenicola	Gulf Rockrose	_/_
Lilaeopsis carolinensis	Carolina Lilaeopsis	_/_
Lilium catesbaei	Southern Red Lily	_/T
Lupinus westianus	Gulfcoast Lupine	*/T
Nuphar lutea ssp. Ulvacea	West Florida Cowlily	*/_
Pinguicula planifolia	Chapman's Buterrwort	*/T
Plantanthera blephariglottis	White Fringed Orchid	_/T
Pogonia ophioglossoides	Rose Pogonia	_/T
Sarracenia leucophylla	White-Top Pitcherplant	*/E
Sarracenia psittacina	Parrot Pitcherplant	_/T
Sarracenia purpurea	Purple Pitcherplant	_/T
Spiranthes praecox	Grass-Leaf Ladies' Tresses	_/_
Woodwardia areolata	Netted Chain Fern	_/_
Xyris drummondii	Drummond's Yellow-Eyed Grass	*/_
Animals		
Agarodes ziczac	Zigzag Caddisfly	_/T
Aimophila aestivalis	Bachman's Sparrow	*/_
Ambystoma cingulatum	Flatwoods Salamander	T/T
Ardea alba	Great Egret	_/_
Ceratocanthus aeneus	Shining Ball Scarab	_/_
Cheumatopsyche petersi	Peter's Little Sister Sedge	_/_
Dromogomphus armatus	Southeastern Spinyleg Dragonfly	_/_
Egretta rufescens	Reddish Egret	*/SSC
Eumeces anthracinus	Coal Skink	_/_
Gymnoscrirtetes morsei	Grasshopper Species	_/_
Haliaeetus leucocephalus	Bald Eagle	T/T
Nemomydas jonesi	Fly Species	_/_
Pandion haliaetus	Osprey	_/_
Pelecanus occidentalis	Brown Pelican	_/SSC
Polylamina pubescens	Panhandle Beach Scarab	_/_

Serica rhypha	Crooked Silky June Beetle	_/_
Sterna antillarum	Least Tern	_/T

Key:
* = Formerly a C2 listed species (removed in 1996)
E = Endangered; T = Threatened; SSC = Species of Special Concern; _ = Unlisted but Rare Species

According to Printiss and Hipes (1997), approximately 57 rare, threatened, and endangered vertebrate species may occur on Hurlburt Field. A total of 17 rare animal species (including invertebrates) are currently known from Hurlburt (Table 1), of which 9 species were located during surveys by the above authors. There are only five federal-listed animals possibly occurring within Hurlburt Field and these include the flatwoods salamander (*Ambystoma cingulatum*), eastern indigo snake (*Drymarchon corais couperi*), piping plover (*Charadrius melodus*), red-cockaded woodpecker (*Picoides borealis*) and bald eagle (*Haliaeetus leucocephalus*). Only three of the five possible species have been discovered within or adjacent to the installation thus far: the flatwoods salamander, red-cockaded woodpecker and bald eagle.

The flatwoods salamander is a federal threatened species that breeds in flatwoods ephemeral wetlands during the fall. This amphibian has been documented at eight locations during surveys west of the explosive ordnance disposal (EOD) area by FNAI (FNAI, 1994b) (Printiss and Hipes, 2000, 2002). Surveys in 1999 further determined that 12 additional wetlands have potential as breeding sites (Printiss and Hipes, 2000). Surveys to confirm these potential breeding sites as supporting the salamander were conducted in 1999, 2000, 2001 and 2002. No known or potential flatwoods salamander breeding sites occur within 7,000 feet of the proposed project site.

The bald eagle is a federal threatened bird that breeds within coastal marshes and adjacent to large rivers and lakes (Printiss and Hipes, 1997) where large isolated trees provide nest sites. While bald eagles are occasionally observed flying over the installation, they are not known to nest within its boundaries.

The former presence of the federal endangered red-cockaded woodpecker (RCW) (*Picoides borealis*) was confirmed in surveys by Eglin's Natural Resources Division in 1989 and by Dr. Jack Stout in 1993 (Labat-Anderson, 1994) that located two inactive clusters. One cluster of seven abandoned cavity trees and one start hole occurred near the installation

boundary east of the Red Horse Training area, while the other cluster of six abandoned cavity trees was in the vicinity of the 801 Housing Area. Many of the original cavity trees have fallen out due to tropical storms and other natural causes. Both of the cluster sites were estimated to have been abandoned for approximately 14-15 years. Clusters are generally not re-utilized if abandoned for more than three years. Endangered species surveys reported in Printiss and Hipes (1997) also confirmed the lack of recent activity by this species. Correspondence dated April 13, 1995 and October 7, 1999 from the U.S. Fish and Wildlife Service (USFWS), indicates that the Permanent Exercise Facility and the 801 Housing Area respectively, have low potential as RCW habitat and no additional consultation by the Air Force is needed unless the specie returns or new activity becomes apparent. The closest known population of red-cockaded woodpeckers is located on Eglin AFB, approximately three miles west of the proposed project.

3.5 Land Use

Hurlburt Field encompasses 6,643 acres. Of this acreage, 674 acres are classified as improved grounds with 57 acres beneath buildings and other surfaces. Semi-improved grounds cover 834 acres, and the remaining 5,069 acres are classified as unimproved. Most significant sized bodies of open water within the installation occur northeast of the airfield in the vicinity of the golf course. The largest body of fresh water is Hurlburt Lake, which has a surface area of approximately 25 acres. There are minimal plans for future development of the large amount of open space currently existing and largely constrained as wetlands or important habitat on Hurlburt Field.

Hurlburt Field is home to the Air Force Special Operations Command (AFSOC). AFSOC is the host command, and its 16th Special Operations Wing, (16 SOW) is the host organization whose primary mission is to organize, train, and equip Air Force special operations forces. Hurlburt requires airfield land use, runway and associated taxiways, aprons, and airfield operations and maintenance facilities.

3.6 Environmental Justice

The purpose of Executive Order 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*, is to identify, address, and avoid disproportionately high and adverse human health or environmental effects on minority and low-income populations.

3.7 Cultural Resources

Section 106 of the National Historic Preservation Act requires federal agencies to analyze the impacts of their actions on historic properties. Areas potentially impacted by activities are surveyed as part of the Air Force Environmental Impact Analysis Process (EIAP). Past surveys of Hurlburt Field have revealed the presence of few archeological sites. Nine archeological sites have been identified through surveys and five have been determined to be eligible for listing on the National Register of Historic Places. Survey reports are filed in the office of the Cultural Resources Manager at Hurlburt Field.

3.8 Installation Restoration Program Sites

The Installation Restoration Program (IRP) identifies, characterizes, and remediates past environmental contamination on Air Force installations. The IRP has established a process to evaluate past disposal sites, control the migration of contaminants, identify potential hazards to human health and the environment, and remediate the sites.

4.0 ENVIRONMENTAL CONSEQUENCES

4.1 Introduction

The purpose of this chapter is to analyze the potential impacts of the Proposed Action and the No-Action Alternative on the environment. A negligible impact may have an inconsequential effect or be unlikely to occur; an adverse impact would have negative consequences. If the current condition of a resource is improved or an undesirable impact is lessened, the impact is considered beneficial. A "no impact" determination is made when the Proposed Action does not noticeable affect a given resource.

4.2 Soils

Proposed Action

The elevated sandy dune area under much of the proposed construction site is not a natural dune but is a result of years of soil deposition by the U.S. Army Corps of Engineers during periodic maintenance dredging of the Intracoastal Waterway navigation channel.

Natural soil formations in the area are derived from sedimentary deposits of fluvial and marine origin. The majority of soils are sandy and have low fertility. Soil density is relatively low, reflecting the high permeability of the surface soils and the relatively low direct runoff in the

area. Erosion potential for all soils is considered slight due to the relatively level topography, except along Santa Rosa Sound, where it is moderate. Silt screens consisting of staked hay bales and properly toed-in filter fabric would be used during and after construction to ensure soils do not migrate off site.

Impacts to soils from the Proposed Action would be negligible.

No-Action Alternative

The beach area enhancements would not be constructed and no impacts would occur.

4.3 Surface Hydrology and Water Quality

Proposed Action

The Proposed Action would be in close proximity to Santa Rosa Sound, approximately 100 feet from the mean high waterline at its nearest point. Silt screens consisting of staked hay bales and toed in filter fabric would be utilized to prevent sediments from migrating off site or entering the sound. Stormwater treatment swales constructed as part of the project would capture and treat stormwater generated on any new impervious areas created as a result of construction. Percolation of trapped water in these basins through several feet of sand would ensure any impurities were removed before they reentered the sound or water table.

Impacts to surface hydrology and water quality from the Proposed Action would be negligible.

No-Action Alternative

The beach area enhancements would not be constructed and no impacts would occur.

4.4 Wetlands and Floodplains

Proposed Action

The Proposed Action is sited in a way as to eliminate direct wetland impacts. Wetlands are in close proximity to the project site and would be protected using silt screens to prevent sedimentation. The silt screens will be installed before any construction or other site preparation and will also eliminate the potential for inadvertent placement of equipment or supplies in wetland areas. No dredge or fill of wetlands will occur and no regulatory permits will be required.

The Proposed Action project site is located in an area designated as floodplain. Relocating the facilities far enough inland to gain the elevation necessary to rise above the 100-year floodplain would not be compatible with the nature of the project. See Figure 2 on page 17 for a map depicting the construction site, 100-year floodplain and nearby wetlands.

The small size of the Proposed Action (total 31,380 square feet), the fact that: the boardwalk and three of the four pavilions are elevated on pilings, the pavilions are open-air facilities, there are no utilities associated with the project, there would be no permanently occupied facilities and stormwater generated from the pavilion roofs and parking areas will be captured in swales greatly reduces any concerns associated with the floodplain.

The Proposed Action would have a negligible impact on wetlands and floodplains.

No-Action Alternative

The beach area enhancements would not be constructed and no impacts would be incurred.

4.5 Rare, Threatened and Endangered Species

Proposed Action

Numerous surveys have identified three federal-listed animals within or adjacent to Hurlburt Field. They are the flatwoods salamander (Ambystoma cingulatum), red-cockaded woodpecker (Picoides borealis) and bald eagle (Haliaeetus leucocephalus).

The flatwoods salamander is an amphibian that breeds in flatwoods ephemeral wetlands during the fall. This animal has been documented at eight locations during surveys since 1993. A large pine flatwoods area dotted with cypress domes and other wetlands on the western side of Hurlburt is the only area where flatwoods salamanders have been documented. Two areas of potential habitat have been identified in the northeastern part of the base, but four years of surveys have failed to reveal the presence of salamanders. The closest known or potential flatwoods salamander breeding site is over 7,000 feet away from the proposed construction site

.

No negative impacts would be realized to flatwoods salamanders or their habitat from the implementation of the Proposed Action.

Bald eagles are occasionally observed flying over the Hurlburt Field installation but are not known to nest within Hurlburt's boundaries. The closest known bald eagle nest is over 12 miles away on the Eglin Reservation. No large trees that could serve as potential eagle nesting sites would be removed as a result of the Proposed Action. No impacts to the bald eagle would be realized as a result of the Proposed Action being implemented.

The former presence of the federal endangered red-cockaded woodpecker (RCW) on Hurlburt Field was confirmed in surveys that located two inactive clusters. The clusters are estimated to have been abandoned for approximately 14-15 years. Clusters are generally not re-utilized if abandoned for more than three years. Correspondence dated April 13, 1995 and October 7, 1999 from the USFWS indicated that no further consultation would be required with their office relative to RCW on Hurlburt Field unless evidence of new activity by the specie was found. The USFWS concurred with the Air Force that due to various unfavorable conditions and limitations, it was unlikely RCW would re-colonize Hurlburt Field.

The closest known population of RCW is located approximately three miles west of the proposed re-use line on Eglin AFB. Due to its proximity to active RCW colonies and suitable habitat, the Proposed Action will have no impact on the species.

No-Action Alternative

The beach area enhancements would not be constructed and no impacts would be incurred.

4.6 Land Use

Proposed Action

The Proposed Action would take place within the boundary of Hurlburt Field, and affect only Department of Defense affiliated persons with access to the main base. The Proposed Action would not result in significant long-term change in land use of the project site. A temporary change during the construction process would primarily affect users of the beach area who would be excluded from the site until the project was complete. Other potential effects include short traffic delays for persons wishing to enter and leave the marina area. Traffic delays would be a minor inconvenience since this dead-end road has low traffic volume and only services the Hurlburt Marina beyond the beach area.

An AF 103 (digging permit) would be initiated to identify and locate utility lines in the area so they could be avoided.

Impacts to land use from the Proposed Action would be negligible.

No-Action Alternative

The beach area enhancements would not be constructed and no impacts would be incurred.

4.7 Environmental Justice

Proposed Action

The purpose of Executive Order 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*, is to identify, address, and avoid disproportionately high and adverse human health or environmental effects on minority and low-income populations. Since this document focuses only on that portion of the proposed project that would be located on Hurlburt Field, no environmental justice issues would be realized from the Proposed Action.

No-Action Alternative

The beach area enhancements would not be constructed and no impacts would be incurred.

4.8 Cultural Resources

Proposed Action

All Hurlburt Field property south of U.S. Highway 98 has been surveyed for the presence of archeological sites due to the high probability of their occurrence along the shoreline. No areas of archeological significance are located near the proposed site. The nearest archeological areas are site 80K61 which is over 1,000 feet west of the proposed construction area and site 80K133 which is over 1,000 feet east of the proposed construction area.

No impacts to archeological or historical resources would be realized as a result of the Proposed Action and no consultation with the State Historic Preservation Officer (SHPO) would be required.

No-Action Alternative

The beach area enhancements would not be constructed and no impacts would be incurred.

4.9 Installation Restoration Program Sites

No IRP or other known contaminated sites are located within the project area. The nearest IRP site is designated (SS-214) and is approximately 500 feet east of the proposed project. Site SS-214 is in close proximity to an old ferry dock where diesel fuel was discovered in the soil. The site underwent complete remediation in 2002 and wells have been installed for continued monitoring.

No impact should be incurred due to implementation of the Proposed Action.

No-Action Alternative

The beach area enhancements would not be constructed and no impacts would be incurred.

5.0 REFERENCES

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6.0 AUTHOR INFORMATION

Name and Title	Degree	Years of Experience
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7.0 PERSONNEL INTERVIEWED

- Robin Armhold - 16 CES/CEV, Hurlburt Field, FL
- Keith Carnley - 16 CES/CEV, Hurlburt Field, FL
- Tim Hoffman - 16 CES/CEC, Hurlburt Field, FL
- Jackie Lynd - 16 CES/CEV, Hurlburt Field, FL

8.0 MAPS

(See following 2 pages)

Proposed Project Location

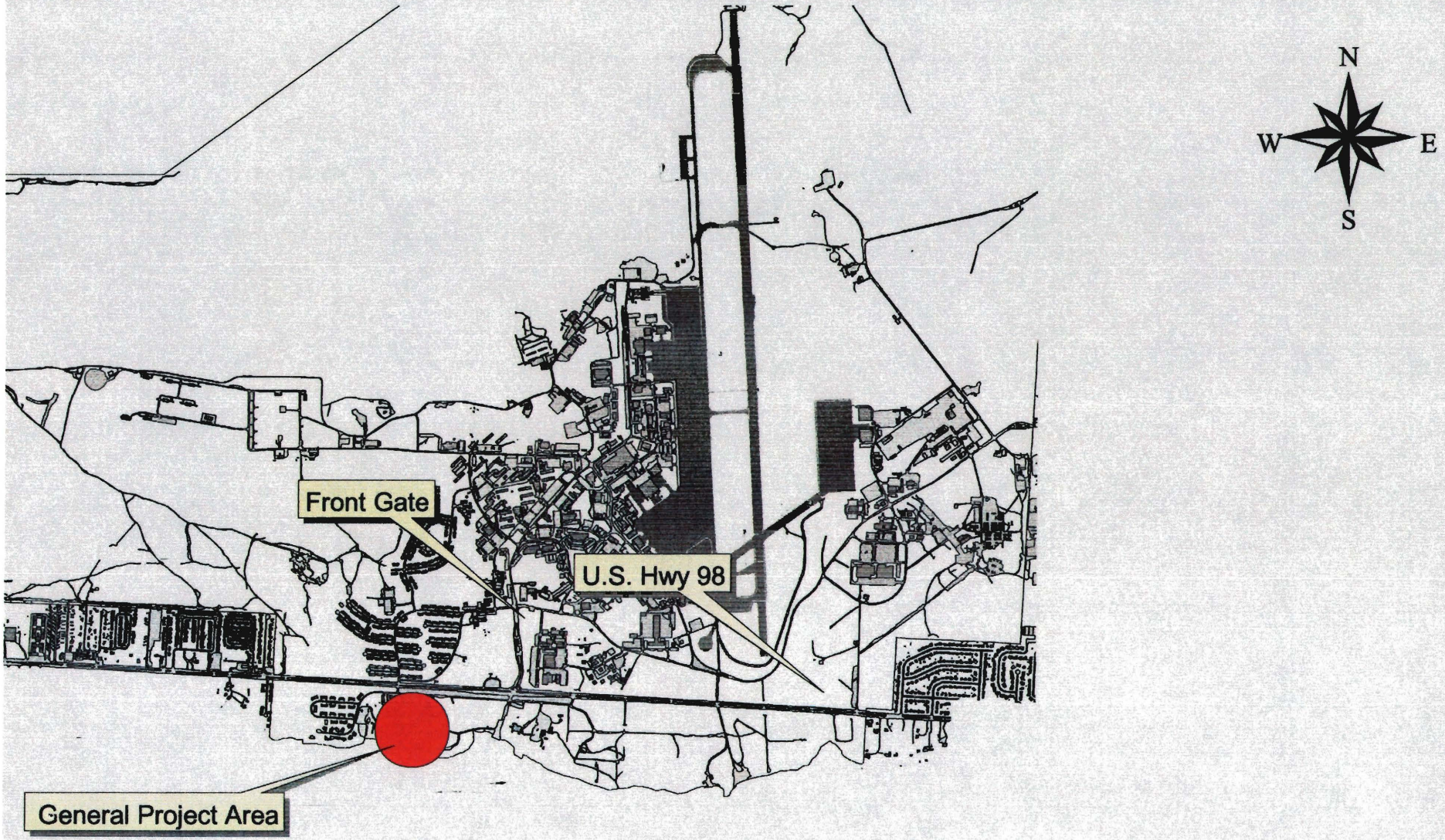

Figure 1

Beach Area Enhancements

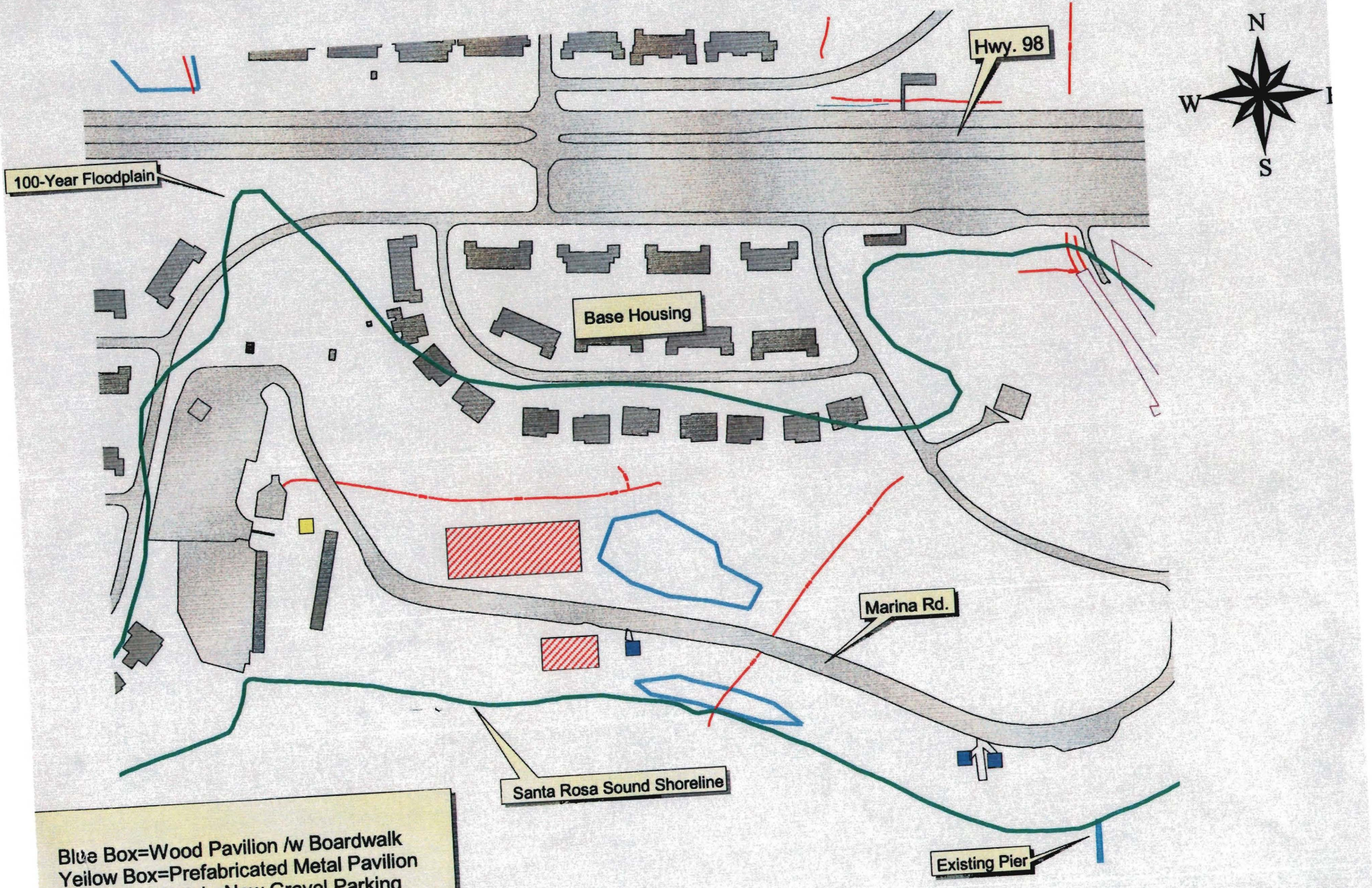

Figure 2